VERTEX™

90% THERMAL EFFICIENCY ENDLESS HOT WATER VERSATILE POWER-VENT DESIGN

GPHE-50

Today's homes demand more hot water than ever before, and the 90% efficient Vertex power-vent gas water heater offers unprecedented levels of performance to meet the need. The 50-gallon Vertex delivers hot water output that rivals a 75-gallon atmospheric gas water heater. In fact, the fully condensing Vertex design is so advanced, it can deliver "endless hot water for showers"…a continuous flow of over 3 gallons per minute.* Yet Vertex is easy to install, with height, diameter and installation requirements similar to standard power-vent units.

HELICAL INTERNAL HEAT EXCHANGER

- Completely surrounded by water in tank, provides much greater heat transfer surface than standard straight flue tube
- Helps produce 90% thermal efficiency, which saves money on operating costs compared to a standard 78% efficient gas water heater

POWER VENTS USING PVC PIPE

- Combined vertical and horizontal vent runs terminating through an outside wall, using Schedule 40 PVC pipe
  - 2" pipe, vents up to 25 equivalent feet
  - 3" pipe, vents up to 65 equivalent feet
  - 4" pipe, vents up to 128 equivalent feet

MODULAR BLOWER

- Equipped with 120 volt, 60 Hz electrical system (rating 5 amps or less), 6-foot cord with standard 3-prong connector
- 2" PVC pipe, elbows and condensate drain supplied to connect heat exchanger outlet to blower
- PVC Vent Attenuation Assembly (VAA) supplied

SIDE-MOUNTED HOT AND COLD RECIRCULATING TAPS

- Allows Vertex to be installed as part of combination space heating/water heating applications or any system requiring a recirculating hot water loop, including radiant floor heating

INTELLI-VENT™ GAS CONTROL

- Equipped with nearly indestructible silicon nitride hot surface ignitor — no standing pilot
- Advanced electronics for more precise control of water temperature and easy to understand system diagnostics

COMMERCIAL GRADE GLASS LINING

- A. O. Smith PermaGlas® Ultra Coat™ process provides superior protection against corrosion
- Protects all interior tank surfaces including inside and outside of helical heat exchanger

TWO HEAVY-DUTY ANODE RODS

- Provide even more protection against corrosion

GREEN CHOICE® GAS BURNER

- Patented "eco-friendly" design reduces NOx emissions by up to 33% and complies with Southern California and Texas requirements

FACTORY-INSTALLED TEMPERATURE AND PRESSURE RELIEF VALVE

MAXIMUM HYDROSTATIC WORKING PRESSURE: 150 PSI

* 3.07 GPM continuous flow, based on 65°F inlet water temperature, 110° outlet temperature.

GAS-FIRED
UL®
LISTED

A.O.Smith
Water Heaters

ARGSS01306
August 2007R

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VERTEX™ 90% THERMAL EFFICIENCY POWER-VENT

CODES AND STANDARDS

- Design-certified by UL (Underwriters Laboratories) according to ANS Z21.10.3
- Meets or exceeds ASHRAE/IESNA 90.1-1999 and 2004 NAECA

SIX-YEAR LIMITED TANK AND PARTS WARRANTY

- For complete warranty details, consult written warranty shipped with heater or contact A. O. Smith

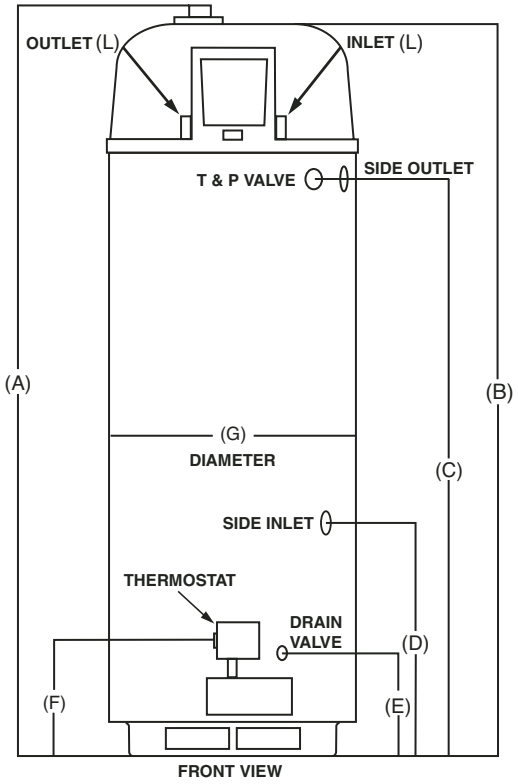
MODEL NUMBER	BTU INPUT PER HOUR	GALLON CAPACITY	FIRST HOUR DELIVERY GALLONS	RECOVERY 90°F RISE GALLONS PER HOUR	SHIPPING WEIGHT LBS
GPHE-50	76,000	50	127	92	210

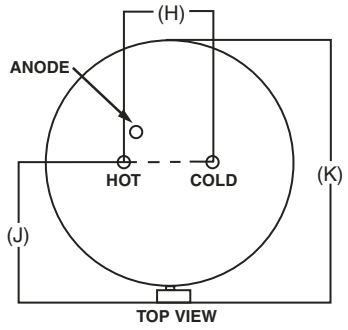
* Natural gas only

DIMENSIONS IN INCHES

MODEL	A	B	C	D	E	F	G	H	J	K
GPHE-50	70-5/8	68-1/4	52	21	9-1/8	12	22	8	15-3/4	27

Inlet and outlet connections: 3/4" male
Circulation loop connections: 3/4" female





* INSTALL IN ACCORDANCE WITH LOCAL CODES

A.O.Smith Water Heaters
www.hotwater.com

A. O. Smith Corporation
500 Tennessee Waltz Parkway, Ashland City, TN 37015

For Technical Information and Automated Fax Service, call 800-527-1953.
A. O. Smith reserves the right to make product changes or improvements without prior notice.

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